

### **Abstract**

A process for the production of contacts for electrically operated II/VI semiconductor structures (for example laser diodes). The contact materials palladium and gold hitherto used in relation to electrically operated II/VI semiconductor lasers are distinguished by a relatively great, not purely ohmic specific contact resistance in relation to the II/VI cover layer. The consequentially necessary higher operating voltages result in the unnecessary generation of heat and thus substantially accelerate degradation of the entire laser structure. That effect causes a limitation in terms of the service life of II/VI semiconductor laser diodes. The invention permits the operation of semiconductor laser diodes with lower operating voltages. The II/VI semiconductor laser diodes produced with our invention are distinguished by a longer service life. That permits inter alia commercial use of semiconductor laser diodes in the blue-green spectral range.